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# ***International Armament Cooperation and Theater Missile Defense: Why South Korea is Reluctant to Join the Club***

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As the last decade of the millennium comes to a close, US defense leaders continue to grapple with a dauntingly uncertain international order. The humpty-dumpty-like demise of the Soviet Union took with it the rationality of the bipolar framework from which US defense planners had operated since the end of World War II. Adding to the new challenges involving international security has been a series of Hobson's Choices.<sup>1</sup> As Senator John McCain stated in March 1996, the United States has:

... had to choose among cutting force strength, maintaining readiness, or funding force modernization within the constraints of continually declining defense budgets. The result has been reductions in all three areas, but particularly in force modernization.

What to do?

International armaments cooperation has been increasingly championed as a way to develop and acquire weapon systems in an era of declining defense budgets.<sup>2</sup> At its essence, armaments cooperation activities are conducted with nations "... that have solid political and economic ties with the United States, similar military requirements, and a reasonable defense technology base."<sup>3</sup> A Department of Defense (DoD) program that has received top billing as an armaments cooperation project with friends and allies is Theater Ballistic Missile Defense (TBMD or TMD). TMD is seen as a way to "... help strengthen US security relationships, enhance the US counterproliferation strategy, and should that fail, protect against such threats."<sup>4</sup> Over the past few years, the United States has contacted several countries regarding the possibilities of entering a mutually cooperative TMD arrangement. In Europe, the highly mobile and maneuverable Medium Extended Air Defense System is the cooperative TMD project currently underway between the United States, Germany, and Italy. In Asia, the United States has engaged Taiwan, Japan, and the Republic of Korea (ROK) with respective TMD projects. TMD initiatives have met with a fair degree of success. But what happens when an ally is not interested? Despite top-level assurances regarding TMD as a viable solution to the North Korean missile threat, South Korean Government and military officials have continued to reject a US offer for TMD.

## **International Armaments Cooperation**

In a June 1993 memorandum, Deputy Secretary of Defense William Perry set the stage for developing US foreign policy for cooperation:

As we address the issues of defense reinvestment and as our armed forces and those of our allies draw down, it is critical that we look for every opportunity to increase the effectiveness of those forces while making the most efficient use of the resources we apply to our collective defenses. I believe that armaments cooperation can be a primary means of achieving those ends.<sup>5</sup>

The notion of international armaments cooperation was strengthened in February 1995 by Dr. Paul G. Kaminski, then Under Secretary of Defense for Acquisition and Technology. In a speech before a Center for Strategic and International Studies conference, Dr. Kaminski cited the importance of US allies and the increased likelihood of US forces carrying out coalition operations with them: "To modernize the equipment of our defense forces at an affordable cost, we will have to leverage the industrial base of all our nations. [This] means increased emphasis on cooperation with our allies in acquisition and defense equipment."<sup>6</sup>

In March 1997, Defense Secretary William Cohen established formal policy for international armaments cooperation.<sup>7</sup> This policy was echoed shortly thereafter by Paul J. Hoyer (Deputy Under Secretary of Defense for International and Commercial Programs) at a Defense Industry Consultative Committee dinner. With a South Korean delegation, which included high-ranking civilian and military officials, in attendance, Secretary Hoyer reiterated Secretary Cohen's resolve:

In the evolving environment of coalition warfare, limited resources, and a global industrial and technology base, it is DoD policy that we utilize international armaments cooperation to the maximum extent feasible, consistent with sound business practices.<sup>8</sup>

On 20 July 1998, Dr. Jacques Gansler, Under Secretary of Defense for Acquisition and Technology, addressed the South Korean Vice Minister of National Defense, An Bung-Kil, and members of the Korea Institute for Defense Analysis.

Dr. Gansler offered his perspective on "... the future major acquisition and technology challenges faced by the US and the Republic of Korea."<sup>9</sup> Dr. Gansler alluded to North Korea, citing the dangers of proliferation of weapons of mass destruction as well as the need for security cooperation in the form of "... greater equipment interoperability in order to conduct integrated operations in coalition conflicts." He called for an adoption of a new international armaments cooperation model, "... one in which governments establish the military requirements and business rules, but the industries involved establish the best international teams of their own choosing to competitively bid on the work." Finally, Dr. Gansler called on South Korea to consider the importance of interoperability in its selection of a TMD option. At the time, in a post-Cold War development unfathomable a decade before, South Korea was weighing the US-made Patriot against the Russian-made S-300 missile system as competitive offshore procurement options to meet its air defense needs.

## **The US TMD Initiative in East Asia**

Formerly known as the Strategic Defense Initiative Organization, the Ballistic Missile Defense Organization (BMDO) came into existence on 13 May 1993 under a new charter. The charter called for

the DoD warfighting commands to become directly involved in planning for the integration of missile defense systems into operational units.<sup>10</sup> As part of the BMDO's Ballistic Missile Defense Program, TMD has evolved into the DoD's first missile defense priority.<sup>11,12</sup> TMD is a reflection of defense posture adjustments the United States has made since the end of its Cold War standoff with the Soviet Union. TMD is viewed as a way to protect US Armed Forces and allies in forward-deployed locations against the new and growing threat involving the spread of ballistic missile technology and weapons of mass destruction. As a counter to both lower-tier and upper-tier threats, TMD has adopted a family of systems approach.<sup>13</sup> Lower-tier systems are geared to defend at low altitudes against shorter range ballistic and cruise missiles, while upper-tier systems are intended to handle ballistic threats from longer ranges. For example, the Patriot PAC-3 is one of the core lower-tier systems making up part of the TMD family.

Beginning early in 1994, the United States was growing increasingly uncomfortable with fears that North Korea was developing both nuclear weapons and a ballistic missile capability. As a result, President Clinton began considering the deployment of Patriot missiles to strategic areas in South Korea, and US officials urged South Korea to consider procuring the Patriot. According to a US diplomat at the time, John Deutch, the Pentagon's Under Secretary for Acquisition and Technology, proposed that South Korea join the United States in TMD development efforts. US Government and industry sources were said to have calculated, "South Korea has a requirement to acquire about seven Patriot batteries at a cost of approximately \$600M."<sup>14</sup> Raytheon spokesman Dick Sherman acknowledged that company and US Army officials had said that South Korea needs the Patriot and that the South Korean government had expressed interest in the system. Sherman was "... confident, that in the near term they will be acquiring Patriot systems."<sup>15</sup> While initial prospects for the Patriot appeared favorable, ROK enthusiasm for the missile was restrained. On 28 February 1994, South Korean Defense Minister Rhee Byoung-tae said, "South Korea has no plans to purchase Patriot antimissile batteries ... from the United States."<sup>16</sup> Rhee denied charges from opposition lawmakers that a possible Patriot deployment being considered by President Clinton was part of a long-term scheme to sell them to South Korea. He did, however, admit that the ministry was studying the possibility of participating in the TMD program with the United States. He also said that it was inappropriate to connect that program with the possible Patriot deployment. Rhee went on to disclose "... his ministry [was] preparing a strategy to neutralize North Korean scud missiles using airpower while the missiles are still on the ground," and the "... US Patriot deployment plan is just one facet of this strategy."<sup>17</sup> On 18 April 1994, Patriot missiles began arriving at the South Korean port of Yusan.<sup>18</sup>

Cooperative US TMD efforts in East Asia continued with South Korea, Japan, and Taiwan through 1995. Speaking about TMD initiatives with Japan on 23 January 1995, General John Shalikashvili said, "The US is willing to share intelligence from satellite data with Japan if the two countries jointly develop a theater missile defense system."<sup>19</sup> On 21 August 1995, *Defense News* acknowledged that Taiwan, which had already received the US Patriot Modified Air Defense System and was working on an indigenous version of the Patriot PAC-3 called the Tien Kung, was "... assessing the US Army's Theater High Altitude Area Defense (THAAD)."<sup>20</sup> By September 1995, Japan was "... accelerating missile defense studies that [were] expected to lead to joint development with the United States of a TMD system," while "Taiwan was showing [continued] interest in the US THAAD system." Thus, while Japan and Taiwan were both showing interest

in US systems, South Korea, nevertheless, was "... considering Russian offers to jointly manufacture the S-300 antimissile system."<sup>21</sup>

In May 1996, enthusiastic US bipartisan political backing for an Asian regional TMD materialized when Republican Presidential candidate Bob Dole called for a "... Pacific Democracy Defense Program that would extend TMD coverage to Japan, South Korea, Taiwan, and other allies."<sup>22</sup>

By 1997, support for the US-led TMD initiative with Japan began showing signs of slowing. On 6 June 1997, the *Nikkei Shimbun* reported, "... the Japanese government [had] decided on 2 June to postpone its decision on whether to participate in the US-led TMD initiative," but "... Japan [would] continue studying the ballistic missile defense initiative in cooperation with the US."<sup>23</sup> The *Asahi Shimbun* reported, "... the Japanese government [had] told the new US Defense Secretary, William S. Cohen, last April that another three years may be needed before Japan can make a final decision on participation in the TMD initiative."<sup>24</sup> To date, Japanese officials have generally been hesitant regarding TMD. However, a North Korean missile test conducted in August 1998 sparked new interest, and Japan and the United States agreed to begin a joint developmental TMD program in 1999.<sup>26</sup> Taiwan continues to welcome the idea and actively support development and deployment of TMD systems. To date, two indigenously developed TMD-capable systems have been deployed, the Tien Kung-1 and Tien Kung-2. These systems "... are touted by Taiwan defense officials as equivalent to the US Patriot air-defense missile."<sup>25</sup>

While there has been some hesitation on the part of Japan and Taiwan to fully endorse TMD, it is South Korea that has proven to be the hardest sell. At some point in the post-Cold War while South Korea was pondering ways to meet the growing threat posed by North Korea, ROK officials were approached by Russia's state-run weapons export company. Russia was offering "... to sell up to six units of the Russian-built S-300 air defense missile system, including radars, launchers, command and control facilities, missiles, technical support, and associated technology, for a nominal, yet undisclosed price."<sup>27</sup> In addition to its obvious military utility, the sale (estimated at \$400M) would also serve as a way for Russia to chip away at an outstanding debt it still owed South Korea, estimated in October 1996 to be \$1.47B. The purchase of South Korea's air defense system was "... posing a political and economic dilemma for officials in Seoul who [had to] choose between a tempting technology transfer and debt-reduction package from Moscow or the Patriot system supported by US political and military leaders."<sup>28</sup> By April 1997, the missile debate captured the headlines and dominated the political scene in South Korea. Despite statements from the ROK defense procurement sector acknowledging the importance of interoperability with US systems and the likelihood the Republic of Korea would not buy the Russian S-300s, public sentiment in South Korea appeared to favor the purchase of Russian systems.<sup>29</sup> The legitimacy of the long-held reign of the United States as chief weapons supplier to the Republic of Korea was being brought into question.

In its 8 March 1999 issue, *Defense News* reported that South Korean officials were finally "... turning thumbs down on [the] proposed Russian S-300 missile defense package," citing an "... inability to operate with US Patriots already deployed in Korea."<sup>30</sup> A headline article in the same issue, however, highlighted the fact that South Korea was still turning away from a TMD solution to deal with the North Korean missile threat. Instead of TMD, "... government and military officials [in Seoul] are seeking Washington's support for development and deployment of medium-range missiles capable of striking critical targets in North Korea."<sup>31</sup> In essence, the ROK Government announced that it was rejecting a defensive stance in favor of an offensive deterrent capability. However, restrictions have

been in place, that limit South Korea's ability to pursue an offensive capability. These restrictions have been the subject of contentious talks between the Republic of Korea and the United States.

### **ROK Attempts at Indigenous Missile Development**

At some point during the late 1970s, South Korea began to take steps to develop an indigenous missile manufacturing capability. It developed and deployed the Hyonmu surface-to-surface missile (SSM), which was based on a modified version of the US-made Nike Hercules.<sup>32,33</sup> The Hyonmu had a range of 180 kilometers and a payload of 500 kilograms.<sup>34</sup> In 1979, the ROK military began work on an extended-range Hyonmu. The intent behind production of this version was to develop a range capability of 260 kilometers with a payload of 450 kilograms.<sup>35,36</sup> ROK initiatives in this endeavor were unilateral, as the United States did not support the development effort.

Concerned that development of a missile with a 260-kilometer range could launch a destabilizing missile race on the Korean Peninsula, US officials worked with South Korean counterparts to negotiate an agreement that would basically restrict such production. By 1990, a bilateral agreement in the form of a memorandum of understanding (MOU) was signed between the United States and the Republic of Korea. It was based on a prior agreement reached in 1979 limiting ROK missile development.<sup>37</sup> Under the terms of the agreement, the Republic of Korea agreed to forgo plans to develop missiles beyond a range of 180 kilometers. In essence, this meant the Republic of Korea would scrap development of the extended-range Hyonmu. In exchange, the Republic of Korea received security assurances from the United States as well as "... continued support for South Korea's shorter-range missile program."<sup>38</sup> Prior to the 1990 agreement, in 1989, the US and ROK Governments signed an MOU for cooperative research and development in missile guidance technology in the development of short-range surface-to-air missiles (SAMs).

During the 1995 annual security talks held between the United States and the Republic of Korea, South Korean officials made a formal request to abolish conditions of the 1990 bilateral missile control agreement in favor of full membership in the Missile Technology Control Regime (MTCR).<sup>39</sup> The relevance of South Korea's interest in the MTCR requires some explanation.

The MTCR—created in 1987 by the G-7 governments of the United States, Britain, Canada, Japan, then West Germany, Italy, and France—is an informal, voluntary export control arrangement with guidelines prohibiting the sale or transfer of Category I and Category II technologies.<sup>40,41,42</sup> Category I technology includes all finished missile and unmanned aerial vehicle systems (with the focus and intent to cover full up ballistic and cruise missile systems) that exceed the MTCR payload and range requirements of 500 kilograms (1,100 pounds) and 300 kilometers (186 miles), respectively. Category II items include materiel, components, machinery, and other technologies that could aid in the design, development, testing, and production of systems that could deliver nuclear, chemical, or biological weapons. Members pledge to adhere to the regime's export guidelines and restrict export of items contained in the regime's annex. The idea for the regime grew out of mutual fears by the G-7 governments that rogue states might acquire missiles or offensive missile technology for use as weapons of terror. Today, the regime has expanded to include 29 members. It operates by consensus, and members are required to incorporate the terms of the MTCR into their respective systems of national export control. The MTCR only intended restrictions to apply to exports of missiles and related technology. However, the 300-kilometer, 500-kilogram restriction on indigenous development has become "... a *quid pro quo* for US support of any new member of the regime."<sup>43</sup>

It is noteworthy that while all nations are encouraged to abide by MTCR terms, not all states have been invited to become formal

members. There have been attempts by a number of nonmember states to join the regime. Some nonmembers have gone so far as to make public and legislative commitments to adhere unilaterally to the guidelines and annex of the MTCR. Among these countries is South Korea. Ironically, South Korea's intention to join the regime has not been met with enthusiasm. The reason for this is South Korea has indicated it would use MTCR membership "... as a basis to withdraw from an agreement with the United States that prevents Seoul from developing missile systems with ranges in excess of 180 kilometers."<sup>44</sup>

Membership in the MTCR would permit South Korea to develop missiles capable of carrying a 500-kilogram payload up to a range of 300 kilometers, as opposed to the 1990 US-ROK agreement that limits indigenously produced missiles to a range of 180 kilometers.<sup>45</sup> A consensus to allow South Korean membership in the regime was not reached. Negotiations have continued intermittently since late 1995; however, no firm agreement has been reached to grant South Korea full membership in the MTCR.

In addition to attempts at developing or acquiring SSMs and related technologies, the Republic of Korea has taken steps to acquire and develop short-range SAMs. The Stockholm International Peace Research Institute lists a Republic of Korea order of 67 French-made Crotale SAMs for 1989.<sup>46</sup> By early 1990, South Korea was developing a variant of the French Crotale.<sup>47</sup> The project to modify the Crotale was carried out jointly by South Korea's Goldstar Precision Instruments (missile development), Daewoo Heavy Industries (systems integration), and Samsung (fire control and acquisition radar) with technical assistance from the French contractor Thomson-CSF. On 27 October 1997, South Korea officially announced that it had successfully test-fired its first locally designed, short-range SAM, the Chonma (Pegasus). In the official announcement, officials disclosed that 12 domestic firms and 1 foreign firm were involved in the production of the Chonma but did not name any of the companies.<sup>48</sup>

On 20 October 1997, the ROK Defense Ministry announced that it would purchase 1,000 French-made Mistrals over US Stingers and British Starburst missiles "... in a \$300M project to procure portable surface-to-air missiles."<sup>49</sup> The announcement came 1 week before South Korea test-fired its indigenously produced Chonma, based on the French-made Crotale design. This gave the Republic of Korea its first indigenous SAM capability against the growing ballistic missile threat from North Korea.

### **The Reasons for South Korea's Reluctance to Join the TMD Initiative**

Recalling the requisites for US armaments cooperation activity—solid political and economic ties with the United States, similar military requirements, and a reasonable defense technology base—South Korea would appear to be the perfect TMD partner. To begin with, the ROK Government has maintained solid political and economic ties with the United States throughout the years. In 1987, South Korea had a \$9.5B trade surplus with the United States.<sup>50</sup> In 1988, South Korea's annual trade topped the \$100B mark, "... making it the world's tenth largest trading nation."<sup>51</sup> Militarily, US and ROK forces have stood united against a common enemy for the better part of the 20th century. Today, 37,000 US troops remain in South Korea. Finally, in terms of an acceptable defense technology base, South Korea is by no means a lightweight. In the 1990s, the Republic of Korea was producing "... M-16 rifles, M-60 machine guns, F-16 fighters, UH-60 Black Hawk helicopters, and AN-PRC radio sets [via] license production arrangements."<sup>52</sup> Despite a relationship apparently well suited for TMD cooperation, South Korea has cold-shouldered the idea.

Put simply, the Republic of Korea has rebuffed the notion of signing up to US-led TMD. From as early as 1994, the South Korean Government has systematically sidestepped urgings and invitations from the highest levels of the US Government to join the initiative. The reasons that have brought about ROK reluctance to become involved in TMD appear to be partly political as well as military. Commercial and economic considerations may also play a part.

Politically, the Republic of Korea has made great strides over the years in attaining greater levels of democratization. As a result, public sentiment and pressure from opposition groups are important elements in ROK politics. When South Korean Defense Minister Rhee Byoung-tae stated the Republic of Korea had no plans to purchase Patriots from the United States back in 1994, he was dispelling charges from ROK political opposition leaders that a Patriot deployment to South Korea being considered by the United States at the time was part of a "... long-term scheme to sell them to South Korea."<sup>53</sup> This stance was again manifested when the Republic of Korea began seriously considering the Russian S-300 missile-defense system. It remains a question as to whether the ROK Government ever seriously entertained the idea of introducing a non-interoperable [with US forces and equipment] Russian weapon system or if they were symbolically using the issue as a way to assert its national autonomy. The Republic of Korea may also have been looking at the deal as a way to obtain new and sophisticated technology that would help to someday indigenously develop its own air defense system.

The decision by the Republic of Korea to choose French-made SAMs over US-made Stingers was also a bold statement of buyer autonomy. When viewed against the backdrop of the ROK's indigenous Chonma development, it appears the French were probably willing to provide a tempting offset package involving enhanced transfers of technology. This would help the ROK quest for the technology needed to buttress a fledgling indigenous air defense industry.

Militarily, the Republic of Korea appears to have a fundamentally different strategy with regard to North Korea's missile threat. The Republic of Korea has indicated it prefers to employ an offensive capability in order to deter the northern threat. To achieve this capability, the Republic of Korea has expressed its desire to advance production of the Hyonmu SSM. Thus, the Republic of Korea has been attempting (at least since 1990) to work around a 1979 bilateral agreement it had entered into with the United States that restricted development of indigenous missile production to those with a range up to only 180 kilometers. The ROK's approach has been to gain entry into the MTCR. As a member of the MTCR, the Republic of Korea would be able to develop missiles with a range of 300 kilometers.

The ROK's reasons for wanting to develop an indigenous missile production capability are not confined to defense-related matters. From a commercial standpoint, the Republic of Korea has been open in stating its future goal of developing a space program. The ROK views acceptance into the MTCR and the consequent freedom to develop advanced ballistic technology as a vital step toward future development of commercial rockets for the purpose of launching satellites.<sup>54</sup>

The ROK's unwillingness to go along with the TMD armaments cooperation plan, a well thought-out initiative endorsed by US political and defense department leaders at the highest levels, is somewhat disconcerting. However, viewed from a South Korean perspective, it is also possible that the Republic of Korea may have national plans that no longer mesh perfectly with the bilateral framework that evolved over the years during the Cold War. While the bilateral mechanisms developed during the Cold War on the

Korean Peninsula are still in place, the respective goals pursued by the United States and the Republic of Korea may no longer fit the Cold War scheme. It is possible that the post-Cold War era has brought with it a perceived opportunity for South Korea to think beyond the US-ROK relationship and begin planning for its future role in Northeast Asia.

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(Continued on page 42)

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